

CLAIMS

1. A rotor blade for a wind power plant with an aerodynamic profile having a rotor blade leading edge and a rotor blade trailing edge wherein the rotor blade (10) is curved or angled in its end region (12) in the direction of the trailing edge (20) of the rotor blade (10, 12) in the plane of the rotor blade.

2. A rotor blade according to claim 1 characterised in that the end region (12) extends at an angle of between 1 and 45 degrees relative to the thread axis (14).

3. A rotor blade according to claim 2 characterised in that the angle is in the region of 1 to 15 degrees.

4. A rotor blade according to one of the preceding claims characterised in that the trailing edge of the rotor blade (10) blends fluidly into the trailing edge (20) of the end region (12).

5. A rotor blade according to claim 4 characterised in that the trailing edge (20) of the end region (12) is of a predetermined radius of curvature.

6. A rotor blade according to claim 5 characterised by an increasing curvature towards the rotor blade tip.

7. A rotor blade according to one of the preceding claims characterised in that the end region (12) is in the form of an independent portion which can be fitted into the rotor blade (10).

8. A rotor blade according to one of the preceding claims characterised in that the end region (12) forms at most 1/3 of the rotor blade length.

9. A rotor blade according to claim 7 or claim 8 characterised in that the end region (8) has a region of reduced cross-section for fitting into the rotor blade (10).

10. A rotor blade according to claim 9 characterised in that at least one opening is provided in the region of reduced cross-section.

11. A rotor blade according to one of claims 7 to 10 characterised in that the end region (12) is hollow.

12. A rotor blade according to claim 11 characterised in that provided at its end remote from the afflux flow is an opening for water drainage.

13. A rotor blade according to claim 12 characterised in that a tube portion adjoins the opening.

14. A rotor blade according to one of the preceding claims characterised by a region (13) between the rotor blade root (11) and the end region (12), which region is angled in the direction of the leading edge.

15. A rotor blade according to one of the preceding claims characterised in that the rotor blade (10) comprises glass fibre-reinforced plastic material and that conductive elements for lightning conduction are incorporated into the rotor blade (10) and are in conductive contact with the end region (12).

16. A rotor blade tip for a rotor blade according to one of the preceding claims characterised in that the rotor blade tip (30) is in the form of an independent portion which can be fitted into the end region (12) of the rotor blade (10).

17. A rotor blade tip for a rotor blade with an aerodynamic profile having a pressure side and a suction side, wherein the rotor blade tip is

curved or angled in its outer region in the direction of the pressure side of the rotor blade, characterised in that the outer region narrows.

18. A rotor blade tip according to claim 17 characterised in that in the region of the curve the rotor blade profile blends fluidly into the profile of the outer region.

19. A rotor blade tip according to claim 17 or claim 18 characterised in that the cross-sectional plane of the outer region extends at a predetermined angle relative to the cross-sectional plane of the rest of the rotor blade (10).

20. A rotor blade tip according to one of claims 17 to 19 characterised in that the rotor blade tip (30) is in the form of an independent portion which can be fitted into the rotor blade (10).

21. A rotor blade tip according to one of claims 16 to 20 characterised in that the rotor blade tip (30) has a region of reduced cross-section for fitting into the rotor blade (10).

22. A rotor blade tip according to claim 21 characterised in that at least one opening is provided in the region of reduced cross-section.

23. A rotor blade tip according to one of claims 16 to 22 characterised in that the rotor blade tip (30) is hollow.

24. A rotor blade tip according to claim 23 characterised in that provided at its end remote from the afflux flow is an opening for water drainage.

25. A rotor blade tip according to claim 24 characterised in that a tube portion adjoins the opening.

26. A rotor blade tip according to one of claims 16 to 25 characterised in that it comprises metal, in particular aluminium.

27. A rotor blade having a rotor blade tip according to one of claims 17 to 26.

28. A rotor blade having a rotor blade tip according to one of claims 17 to 26, characterised in that the rotor blade (10) comprises glass fibre-reinforced plastic material and that conductive elements for lightning conduction are incorporated into the rotor blade (10) and are in conductive contact with the rotor blade tip (30).

29. A wind power plant comprising a rotor provided with at least one rotor blade according to one of the preceding claims.